

# WHEAT ESTIMATING PROGRAM

July 2000

The National Agricultural Statistics Service's program for wheat includes a number of estimates that are made on a schedule spanning the crop year. The inclusion of any state in this national program is dependent on that state's portion of the national wheat crop. Washington compiles estimates for acreage, yield, total production, prices, and planted variety for both winter and spring wheat. Crop progress and conditions are also tracked throughout the year and grain stock estimates are compiled quarterly for all wheat.

The survey data used to estimate wheat comes from a series of probability and nonprobability surveys conducted throughout the year. A general description of a probability survey is one for which every farming operation has a known probability of being selected and when selected, represents a known number of similar operations throughout the state. Probability surveys produce not only indications for a particular category, but an estimated sampling error associated with each of those indications. Survey information is gathered voluntarily from wheat growers across the state of Washington, except for the price data, which is collected from grain elevators. All individual data collected through any of these surveys are held in the strictest confidence and are used only in combination with other reports to generate state and county level estimates.

Acreage estimates for winter wheat start in December and are updated in March along with the first indication of spring wheat acreage. Acreage is then reviewed using survey data collected

in June, with the end-of-year estimates being published in early October.

Yield per acre estimates are based on both data reported by producers, as well as data collected from field observations. Monthly probability yield surveys, conducted from May through August, collect information from producers about their expected yields. Another monthly probability survey, Wheat Objective Yield, collects field observations for winter wheat. Small plots are laid out in about 160 randomly selected fields across the state. Counts are made and clippings are taken for analysis up until harvest. Gross yield per acre and post harvest loss are combined to determine an indication of net yield per acre.

Winter and spring wheat crop progress and conditions are collected and published on a weekly basis throughout the year along with selected weather data. Stocks on hand are estimated four times a year for all wheat. Prices received by farmers are estimated monthly and are then used to derive a market-year average price. County level estimates for acreage, yield, and production are prepared after the annual summary is released in January. Data for the county estimates come from a combination of all the above-mentioned survey data, as well as a very large end-of-the-year acreage and production survey. The County Extension Agents also provide supplemental data for their counties to assist in setting the county estimates.

## Crop Progress for Washington, Percent of Activity Completed by Date

Activity and Year	SEPTEMBER				OCTOBER					NOVEMBER		
	5	12	19	26	3	10	17	24	31	7	14	21
<b>Seeded</b>	<b>WINTER WHEAT</b>											
1995	21	43	53	63	72	81	91	96	96	96	98	99
1996	30	52	63	69	82	92	96	98	99	99	99	100
1997	6	24	50	72	87	93	98	99	100	-	-	-
1998	30	52	59	69	73	88	91	97	100	-	-	-
1999	28	45	59	67	79	84	92	93	95	98	100	-
<b>1995-1999 Average</b>	<b>23</b>	<b>43</b>	<b>57</b>	<b>68</b>	<b>79</b>	<b>88</b>	<b>94</b>	<b>97</b>	<b>98</b>	<b>98</b>	<b>99</b>	<b>100</b>
<b>Emerged</b>												
1995	7	18	29	39	54	59	74	84	87	88	91	97
1996	9	27	43	54	64	70	82	92	93	95	97	98
1997	-	11	30	50	67	78	87	92	-	-	-	-
1998	-	21	29	51	62	74	80	89	97	-	-	-
1999	-	9	25	39	58	63	81	82	87	91	92	97
<b>1995-1999 Average</b>	<b>8</b>	<b>17</b>	<b>31</b>	<b>47</b>	<b>61</b>	<b>69</b>	<b>81</b>	<b>88</b>	<b>91</b>	<b>91</b>	<b>93</b>	<b>97</b>

## Winter Wheat: Acreage, Yield, & Production, By Counties, Washington, 1999

County and District	Total Planted	Harvested for Grain								
		Acres			Yield Per Acre			Production		
		Irrigated	Non Irrigated	Total	Irrigated	Non Irrigated	Total	Irrigated	Non Irrigated	Total
<b>COUNTY</b>		<b>Acres</b>			<b>Bushels</b>			<b>Bushels</b>		
Adams	248,300	42,800	172,700	215,500	88.3	38.3	48.2	3,778,000	6,607,000	10,385,000
Asotin	15,200	-	12,300	12,300	-	53.7	53.7	-	660,000	660,000
Benton	100,200	3,200	84,400	87,600	122.5	29.1	32.5	392,000	2,452,000	2,844,000
Columbia	62,400	1/	1/	51,000	1/	1/	69.3	1/	1/	3,533,000
Douglas	166,600	800	153,400	154,200	100.0	45.7	46.0	80,000	7,017,000	7,097,000
Franklin	86,100	18,700	63,100	81,800	88.8	27.0	41.1	1,660,000	1,704,000	3,364,000
Garfield	53,900	-	50,600	50,600	-	59.7	59.7	-	3,020,000	3,020,000
Grant	164,000	44,900	106,800	151,700	117.7	40.3	63.2	5,284,000	4,300,000	9,584,000
Klickitat	28,500	-	-	26,500	-	-	38.6	-	-	1,022,000
Lincoln	265,000	28,800	198,000	226,800	103.8	57.0	62.9	2,989,000	11,288,000	14,277,000
Okanogan	7,600	-	5,500	5,500	-	49.3	49.3	-	271,000	271,000
Skagit	4,400	-	3,700	3,700	-	85.9	85.9	-	318,000	318,000
Snohomish	300	-	200	200	-	75.0	75.0	-	15,000	15,000
Spokane	96,800	1/	1/	84,600	1/	1/	59.4	1/	1/	5,022,000
Stevens	5,100	-	3,300	3,300	-	62.7	62.7	-	207,000	207,000
Walla Walla	188,700	18,900	143,300	162,200	84.1	62.1	64.7	1,590,000	8,904,000	10,494,000
Whitman	372,800	1/	1/	321,900	1/	1/	71.5	1/	1/	23,016,000
Yakima	30,100	9,000	18,000	27,000	115.1	23.9	54.3	1,036,000	430,000	1,466,000
Other Counties	4,000	4,900	482,700	3,600	79.8	67.3	73.6	391,000	32,467,000	265,000
<b>DISTRICTS</b>										
West	6,000	-	5,000	5,000	-	86.0	86.0	-	430,000	430,000
Central	169,000	14,000	135,000	149,000	114.5	30.8	38.7	1,603,000	4,164,000	5,767,000
Northeast	102,000	2,000	86,000	88,000	78.0	59.0	59.5	156,000	5,077,000	5,233,000
East Central	930,000	136,000	694,000	830,000	101.4	44.5	53.9	13,791,000	30,916,000	44,707,000
Southeast	693,000	20,000	578,000	598,000	82.5	67.6	68.1	1,650,000	39,073,000	40,723,000
<b>STATE TOTAL</b>	<b>1,900,000</b>	<b>172,000</b>	<b>1,498,000</b>	<b>1,670,000</b>	<b>100.0</b>	<b>53.2</b>	<b>58.0</b>	<b>17,200,000</b>	<b>79,660,000</b>	<b>96,860,000</b>

- Not applicable.

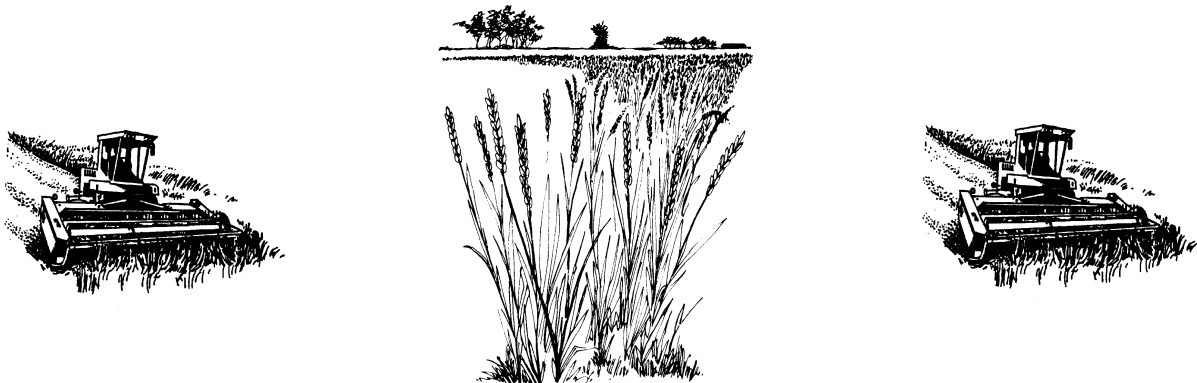
1/ Included in "Other Counties" category. "Other Counties" is a combination of counties that could not be published, plus the irrigated and non-irrigated practice data that could not be published at the county level.

## Spring Wheat: Acreage, Yield, & Production, By Counties, Washington, 1999

County and District	Total Planted	Harvested for Grain								
		Acres			Yield Per Acre			Production		
		Irrigated	Non Irrigated	Total	Irrigated	Non Irrigated	Total	Irrigated	Non Irrigated	Total
<b>COUNTY</b>		<b>Acres</b>			<b>Bushels</b>			<b>Bushels</b>		
Adams	82,800	16,900	65,100	82,000	72.4	23.9	33.9	1,224,000	1,558,000	2,782,000
Asotin	12,200	-	12,100	12,100	-	33.9	33.9	-	410,000	410,000
Benton	18,000	2,600	15,400	18,000	70.0	19.3	26.6	182,000	297,000	479,000
Columbia	21,000	1/	1/	20,800	1/	1/	40.2	1/	1/	837,000
Douglas	46,300	1/	1/	45,800	1/	1/	22.0	1/	1/	1,008,000
Franklin	41,600	9,300	31,800	41,100	107.4	33.9	50.5	999,000	1,078,000	2,077,000
Garfield	20,100	-	19,900	19,900	-	34.2	34.2	-	680,000	680,000
Grant	31,200	24,100	6,800	30,900	94.1	27.1	79.3	2,267,000	184,000	2,451,000
Klickitat	17,500	1/	1/	17,500	1/	1/	22.6	1/	1/	396,000
Lincoln	92,100	1/	1/	91,200	1/	1/	42.7	1/	1/	3,896,000
Okanogan	4,700	1/	1/	4,700	1/	1/	28.1	1/	1/	132,000
Spokane	28,900	1/	1/	28,900	1/	1/	49.2	1/	1/	1,421,000
Stevens	2,400	1/	1/	2,400	1/	1/	48.3	1/	1/	116,000
Walla Walla	47,400	9,800	37,200	47,000	82.9	40.2	49.1	812,000	1,494,000	2,306,000
Whitman	135,300	1/	1/	134,200	1/	1/	51.9	1/	1/	6,966,000
Yakima	18,000	6,900	11,100	18,000	99.9	24.7	53.5	689,000	274,000	963,000
Other Counties	5,500	13,400	337,600	5,500	72.5	41.9	65.5	972,000	14,160,000	360,000
<b>DISTRICTS</b>										
West	1,000	-	1,000	1,000	-	77.0	77.0	-	77,000	77,000
Central	62,000	12,000	50,000	62,000	93.0	22.0	35.9	1,116,000	1,111,000	2,227,000
Northeast	32,000	2,000	30,000	32,000	70.5	47.4	48.8	141,000	1,422,000	1,563,000
East Central	294,000	59,000	232,000	291,000	85.8	30.8	42.0	5,063,000	7,151,000	12,214,000
Southeast	236,000	10,000	224,000	234,000	82.5	46.3	47.9	825,000	10,374,000	11,199,000
<b>STATE TOTAL</b>	<b>625,000</b>	<b>83,000</b>	<b>537,000</b>	<b>620,000</b>	<b>86.1</b>	<b>37.5</b>	<b>44.0</b>	<b>7,145,000</b>	<b>20,135,000</b>	<b>27,280,000</b>

- Not applicable.

1/ Included in "Other Counties" category. "Other Counties" is a combination of counties that could not be published, plus the irrigated and non-irrigated practice data that could not be published at the county level.



**Crop Progress for Washington**  
**Percent of Activity Completed by Date**

Activity and Year	APRIL					MAY		
	2	9	16	23	30	7	14	21
<b>Seeded</b>	<b>SPRING WHEAT</b>							
1996	-	28	38	45	57	72	87	92
1997	-	34	48	60	71	85	94	99
1998	20	46	66	81	91	97	100	100
1999	21	47	62	72	87	96	98	100
2000	25	47	67	84	91	97	100	100
<b>1996-2000 Average</b>	<b>21</b>	<b>40</b>	<b>56</b>	<b>68</b>	<b>79</b>	<b>89</b>	<b>96</b>	<b>98</b>
<b>Emerged</b>								
1996	-	13	21	30	41	52	66	73
1997	-	14	21	34	49	61	75	86
1998	9	24	39	52	70	87	96	99
1999	4	11	29	49	61	76	87	94
2000	-	13	31	48	63	81	89	96
<b>1996-2000 Average</b>	<b>3</b>	<b>15</b>	<b>28</b>	<b>43</b>	<b>57</b>	<b>71</b>	<b>83</b>	<b>90</b>

**Crop Progress for Washington**  
**Percent of Activity Completed by Date**

Activity and Year	MAY				JUNE				JULY		
	7	14	21	28	4	11	18	25	2	9	16
<b>Headed</b>	<b>WINTER WHEAT</b>										
1996	-	1	7	22	36	62	84	96	100	-	-
1997	-	2	14	40	64	74	87	98	99	-	-
1998	4	12	28	52	79	95	100	100	-	-	-
1999	-	1	4	13	44	73	93	99	-	-	-
2000	3	7	20	45	60	86	92	98	100	-	-
<b>1996-2000 Average</b>	<b>1</b>	<b>5</b>	<b>15</b>	<b>34</b>	<b>57</b>	<b>78</b>	<b>91</b>	<b>98</b>	<b>100</b>		
<b>Headed</b>	<b>SPRING WHEAT</b>										
1996	-	-	2	9	15	24	42	55	63	76	94
1997	-	-	0	4	11	29	50	66	83	91	99
1998	-	-	-	-	11	46	72	88	97	99	99
1999	-	-	-	-	2	29	52	69	82	95	99
2000	-	-	-	2	15	40	69	72	82	92	-
<b>1996-2000 Average</b>				<b>3</b>	<b>11</b>	<b>34</b>	<b>57</b>	<b>70</b>	<b>81</b>	<b>91</b>	<b>98</b>

### Crop Progress for Washington Percent of Activity Completed by Date

Activity and Year	JULY		AUGUST					SEPTEMBER			
	18	25	1	8	15	22	29	5	12	19	26
<b>Harvested</b>	<b>WINTER WHEAT</b>										
1995	3	12	29	44	56	70	84	93	98	-	-
1996	2	11	23	36	48	67	86	96	99	-	-
1997	1	5	21	38	69	86	95	99	100	-	-
1998	7	20	30	55	77	91	97	99	100	-	-
1999	2	8	18	34	45	66	84	95	100	-	-
<b>1995-1999 Average</b>	<b>3</b>	<b>11</b>	<b>24</b>	<b>41</b>	<b>59</b>	<b>76</b>	<b>89</b>	<b>96</b>	<b>99</b>	<b>-</b>	<b>-</b>
<b>Harvested</b>	<b>SPRING WHEAT</b>										
1995	0	2	8	19	32	56	76	88	96	99	100
1996	-	1	3	11	23	44	71	88	96	99	100
1997	-	-	2	16	49	69	89	97	99	100	100
1998	-	6	11	25	55	77	92	97	100	100	100
1999	-	1	4	7	18	35	54	83	95	98	100
<b>1995-1999 Average</b>	<b>-</b>	<b>2</b>	<b>6</b>	<b>16</b>	<b>35</b>	<b>56</b>	<b>76</b>	<b>91</b>	<b>97</b>	<b>99</b>	<b>100</b>

### Wheat: Acreage, Production, Price, and Value, Washington, 1995-99

Crop And Year	Acreage		Yield Per Acre	Unit	Production	Avg. Price Per Unit	Value of Production	Value Per Harv. Acre
	Planted	Harvested						
	<b>1,000 Acres</b>				<b>1,000 Units</b>	<b>\$ Per Bushel</b>	<b>1,000 Dollars</b>	<b>\$ Per Acre</b>
<b>Wheat, Winter</b>								
1995	2,250	2,150	62	Bu.	133,300	4.81	641,173	298
1996	2,400	2,350	70	Bu.	164,500	4.11	676,095	288
1997	2,250	2,150	66	Bu.	141,900	3.36	476,784	222
1998	2,200	2,100	65	Bu.	136,500	2.59	353,535	168
<b>1999</b>	<b>1,900</b>	<b>1,670</b>	<b>58</b>	<b>Bu.</b>	<b>96,860</b>	<b>3.00</b>	<b>290,580</b>	<b>174</b>
<b>Wheat, Spring</b>								
1995	450	445	46	Bu.	20,470	4.95	101,327	228
1996	400	395	46	Bu.	18,170	4.38	79,585	201
1997	440	430	54	Bu.	23,220	3.61	83,824	195
1998	470	465	45	Bu.	20,925	2.90	60,683	131
<b>1999</b>	<b>625</b>	<b>620</b>	<b>44</b>	<b>Bu.</b>	<b>27,280</b>	<b>3.25</b>	<b>88,660</b>	<b>143</b>
<b>Wheat, All</b>								
1995	2,700	2,595	59.3	Bu.	153,770	4.83	742,500	286
1996	2,800	2,745	66.5	Bu.	182,670	4.14	755,680	275
1997	2,690	2,580	64.0	Bu.	165,120	3.39	560,608	217
1998	2,670	2,565	61.4	Bu.	157,425	2.63	414,218	161
<b>1999</b>	<b>2,525</b>	<b>2,290</b>	<b>54.2</b>	<b>Bu.</b>	<b>124,140</b>	<b>3.05</b>	<b>379,240</b>	<b>166</b>

## Wheat Estimating Program for Washington, 2000 Crop

DATE	REPORT	WINTER WHEAT			SPRING WHEAT		
		Planted Acreage	Harvested Acreage	Yield/ Production	Planted Acreage	Harvested Acreage	Yield/ Production
1/12/00	Winter Wheat Seedings						
3/31/00	Prospective Plantings						
5/12/00	Crop Production						
6/09/00	Crop Production						
6/30/00	Acreage Report						
7/1/00	Wheat Variety Report	1/			1/		
7/12/00	Crop Production						
8/11/00	Crop Production						
9/12/00	Crop Production						
9/29/00	Small Grains Annual Report						
1/01	Annual Summary						
3/01	County Estimates	2/	2/	2/	2/	2/	2/

Estimate not made for shaded areas. Unless noted, all estimates are at the state level.

1/ Estimates made for Agricultural Statistics Districts, by variety, preliminary planted acreage by county.

2/ Estimates made for Counties.

<u>ALL WHEAT</u>	<u>REFERENCE</u>	<u>DATE RELEASED</u>	<u>REPORT</u>	<u>LEVEL</u>
Stocks	September 1	September 30, 1999	Grain Stocks	State
	December 1	January 12, 2000	Grain Stocks	State
	March 1	March 31, 2000	Grain Stocks	State
	June 1	June 30, 2000	Grain Stocks	State
Production by Class - U.S. level only corresponding to Crop Production: State Data in Annual Summary				
<u>PRICES</u>	Mid-month*	Last Work Day of Month	Agricultural Prices	State/National
	Full-month**			
	Season average	5 month-November	Agricultural Prices	National
		12 month-June	Agricultural Prices	State/National

\* Mid-month prices should reflect the average price received by farmers during the 14th-17th of the current month.

\*\* Full month prices should reflect the average price received by farmers for the entire previous month for all methods of sales.